

AMENDMENTS TO THE CLAIMS

1-10. (Canceled)

11. (Currently Amended) A radio-frequency transmitter with a function of distortion compensation, comprising:

a branch part ~~operable to branch for branching~~ an intermediate-frequency electrical signal subjected to frequency division multiplexing into ~~two~~ a first branched electrical signal and a second branched electrical signal;

a delay part ~~for delaying~~ operable to delay one of the first branched electrical signal ~~signals branched by said branch part~~ by a predetermined length of time;

a distortion generating part ~~for generating~~ operable to generate, from the ~~other of the second branched electrical signal~~ signals branched by said branch part, a distortion component of a predetermined phase and amplitude;

a combiner ~~for combining~~ operable to combine the delayed first branched electrical signal outputted from said delay part and the distortion component outputted from said distortion generating part;

a frequency conversion part ~~for converting~~ operable to convert a resulting signal outputted from said combiner into a predetermined frequency radio-frequency; and

a radio-frequency optical transmission part ~~for converting~~ operable to convert a resulting signal converted into the predetermined frequency radio-frequency by said frequency conversion part into an optical signal; wherein

the distortion component generated in said distortion generating part is opposite in phase to a nonlinear distortion component generated ~~occurred~~ in said radio-frequency optical transmission part when the resulting signal converted into the predetermined radio-frequency is converted into the optical signal.

12. (Canceled)